

Daoyuan Lai
Southern University of Science and Technology (SUSTech)
Department of Statistics and Data Science
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EDUCATION

Southern University of Science and Technology, China	2016 -present
Major in Statistics	GPA 3.69/4.00

RESEARCH EXPERIENCE

Prof. Zhixiang Lin's Group (Biomedicine and Data Science)	Sep. 2019-
<i>Undergraduate Research Assistant</i>	
<i>The Chinese University of Hong Kong, Department of Statistics</i>	

Prof. Zhaojian's Li's Lab (Pattern Recognition)	Jun. 2019 -Sep. 2019
<i>Undergraduate Research Assistant (Remote)</i>	
<i>Michigan State University, Department of Mechanical Engineering</i>	

- Optimizing an efficient online identification methodology with a composite local model structure, conducting a convergence analysis of the algorithm.
- Identifying traffic system's parameters by implementing a decentralized sparse multitask recursive least square algorithm.

Prof. Guo-Liang Tian's Group (Computational Statistics and Optimization)	Sep. 2018-
<i>Undergraduate Research Assistant</i>	
<i>SUSTech, Department of Statistics and Data Science</i>	

- Solving the skew-t-normal distribution's MLE by applying the MM algorithm with significantly less computational cost, compared with Newton's method.

Prof. Chenglong Fu's Lab (Computer Vision)	Jan. 2017 -Feb. 2017
<i>Undergraduate Research Assistant</i>	
<i>SUSTech, Department of Mechanical and Energy Engineering</i>	

- Demonstrating environmental features' estimation by using the random sample consensus (RANSAC) algorithm and contributed to optimizing the prostheses' recognition.

PUBLICATION

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- Zhang, K., Xiong, C., Zhang, W., Liu, H., **Lai, D.**, Rong, Y., & Fu, C. (2019). Environmental features recognition for lower limb prostheses toward predictive walking. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, 27(3), 465-476.

TEACHING

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| • Teaching Assistant: Computational Statistics (Graduate Course) | 2019 |
| • Teaching Assistant: Bayesian Statistics (Graduate Course) | 2020 |

AWARDS & HONORS

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| • Outstanding Undergraduate Scholarship of SUSTech | 2017, 2018, 2019 |
| • Dean's Scholarship (Shuli College, SUSTech) | 2018 |

STANDARD TEST

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| • IELTS Test | 7.0 (R: 8.5 L: 8.0 S: 5.5 W:5.5) | Aug. 2018 |
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COMPUTATION SKILLS

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- MATLAB, R, Java, LaTeX, CAD, CAXA